STATE OF MARYLAND

DHMH

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# December 11, 2008
# Public Health & Emergency Preparedness Bulletin: # 2008:49
# Reporting for the week ending 12/06/08 (MMWR Week #49)

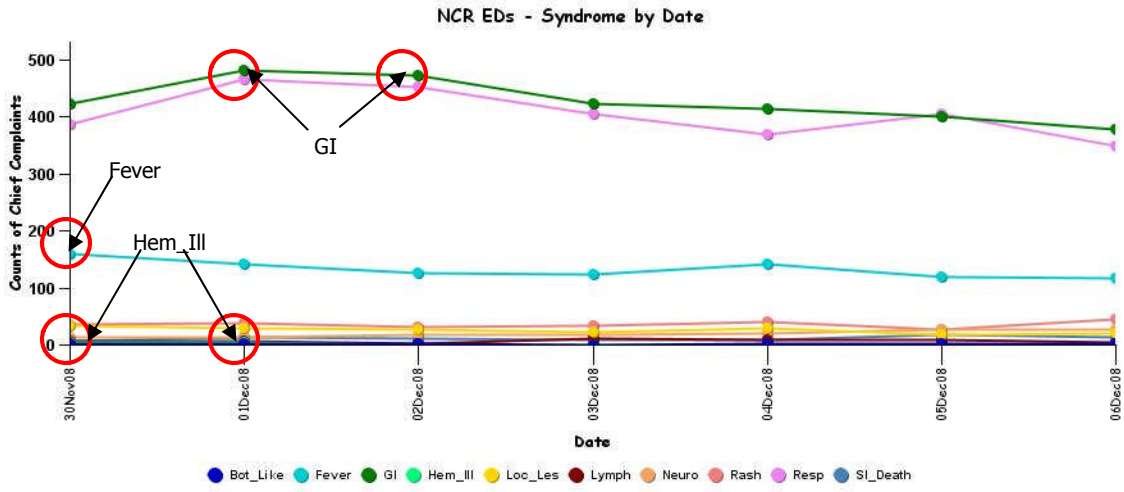
## CURRENT HOMELAND SECURITY THREAT LEVELS

**National:** **Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)**
**Maryland:** **Yellow (ELEVATED)**

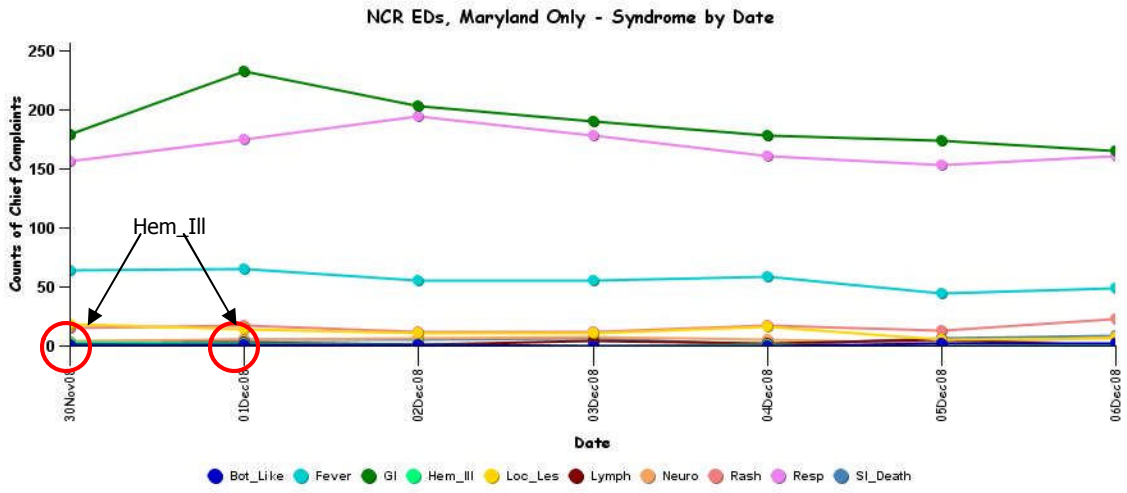
## SYNDROMIC SURVEILLANCE REPORTS

**ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):** Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

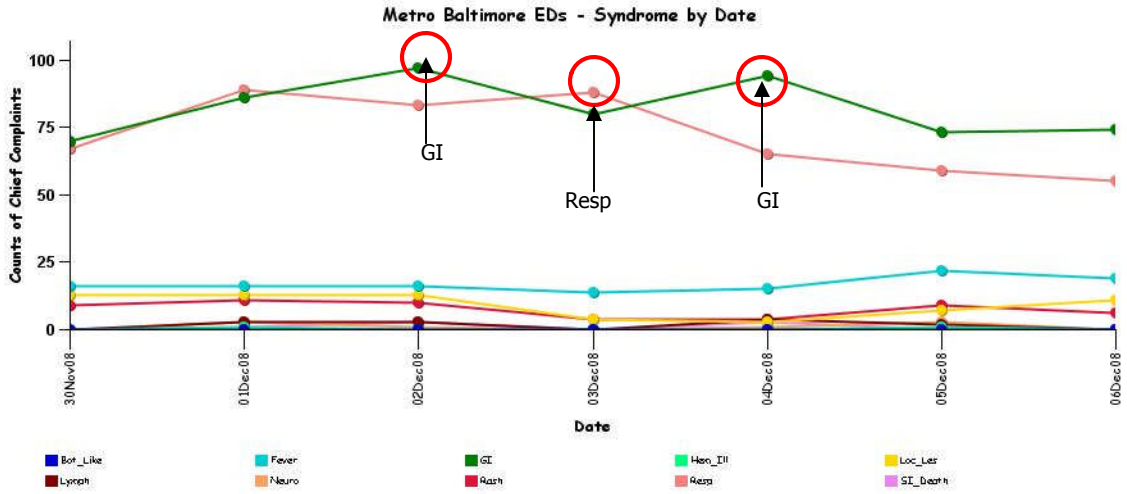
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.




* Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system.

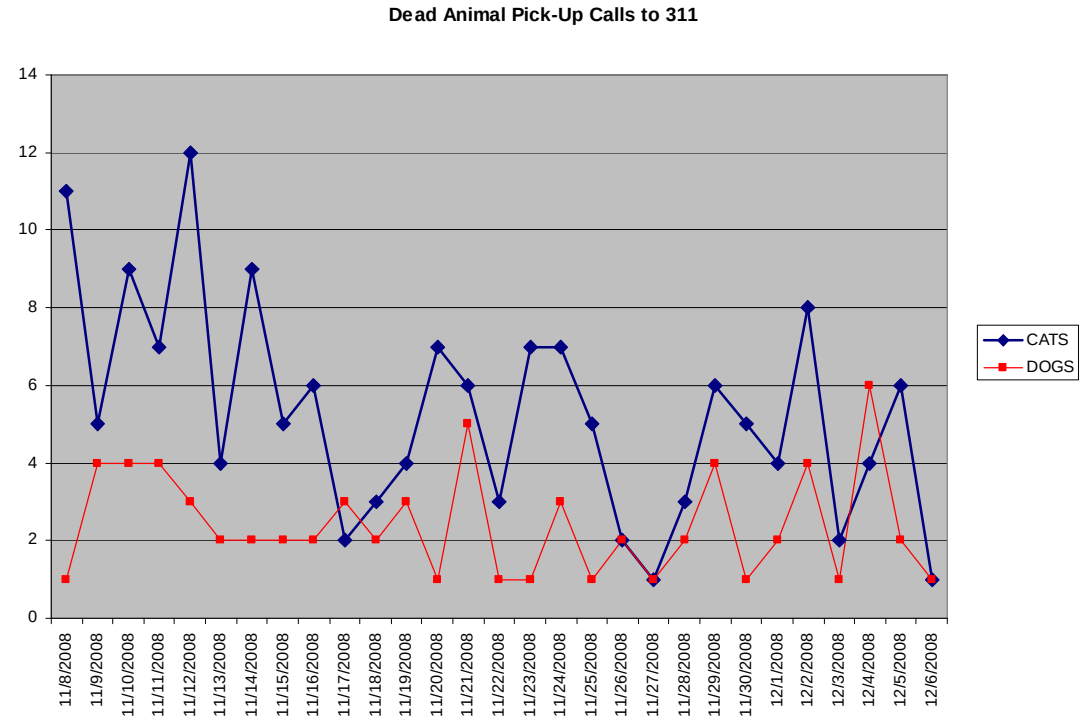



* Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system.



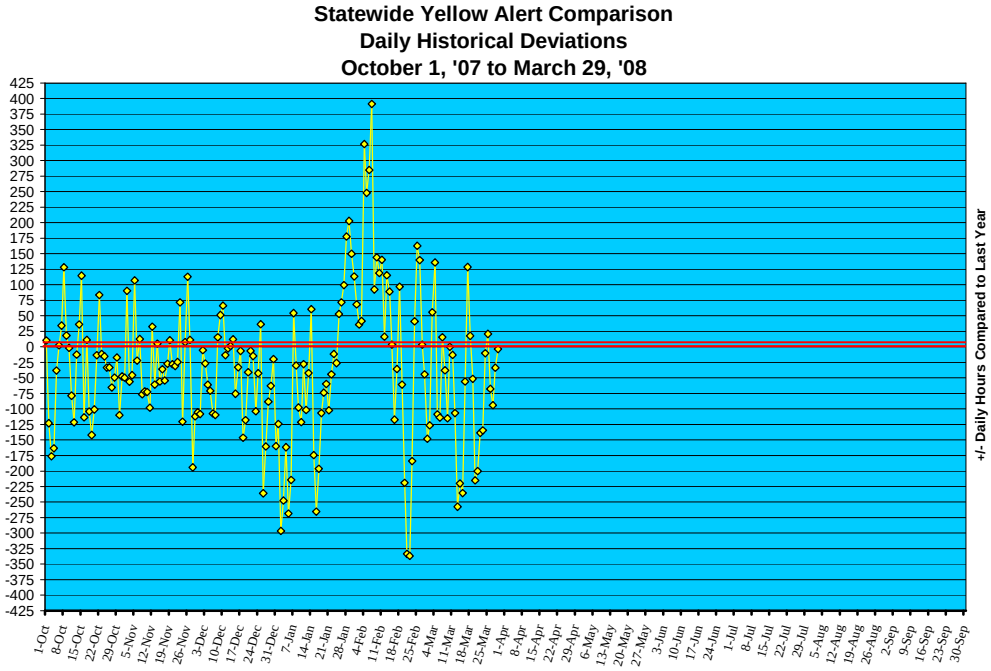

* Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

**BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT:** No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.




## REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

**YELLOW ALERT TIMES (ED DIVERSION):** The reporting period begins 10/01/06.
*Note: No new data available at this time.



**REVIEW OF MORTALITY REPORTS**

**Office of the Chief Medical Examiner:** OCME reports no suspicious deaths related to BT for the week.

**MARYLAND TOXIDROMIC SURVEILLANCE**

**Poison Control Surveillance Monthly Update:** Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in October 2008 did not identify any cases of possible terrorism events.

**REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS**

**COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):**

| **Meningitis:** | **Aseptic** | **Meningococcal** |
|---|---|---|
| New cases (Nov 30 – Dec 6, 2008): | 18 | 1 |
| Prior week (Nov 23 – 29, 2008): | 12 | 1 |
| Week#49, 2007 (Dec 2 - 8, 2007): | 10 | 0 |

**OUTBREAKS: 16 outbreaks were reported to DHMH during MMWR Week 49 (Nov. 30- Dec. 6, 2008):**

**12 Gastroenteritis outbreaks**
9 outbreaks of GASTROENTERITIS associated with Nursing Homes
2 outbreaks of GASTROENTERITIS associated with Assisted Living Facilities
1 outbreak of GASTROENTERITIS associated with a Transitional Housing Facility

**3 Foodborne outbreaks**
1 outbreak of FOODBORNE GASTROENTERITIS associated with a Private Home
1 outbreak of FOODBORNE GASTROENTERITIS associated with a Restaurant
1 outbreak of FOODBORNE GASTROENTERITIS associated with a Wedding

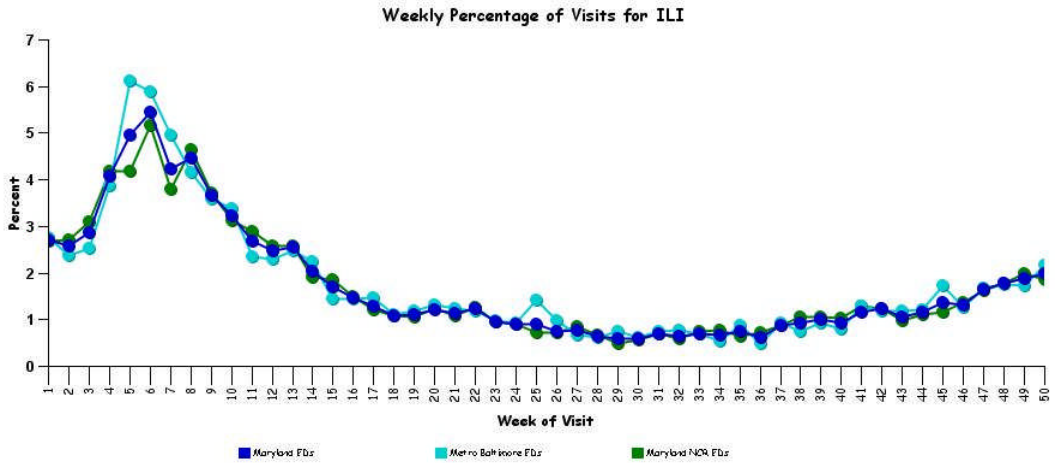
**1 Respiratory illness outbreak**
1 outbreak of PNEUMONIA associated with a Nursing Home

**MARYLAND SEASONAL FLU STATUS:**

Influenza activity in Maryland for Week 49 was SPORADIC. During week 49, 9 lab confirmed cases of influenza were reported DHMH. The season total is 30 cases.

**SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS:**

Graph shows the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. This graph does not represent confirmed influenza.



**PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS**

**WHO Pandemic Influenza Phase:** Phase 3/4: No or very little human-to-human transmission/Small clusters with limited human-to-human transmission, suggesting that the virus is not well adapted to humans

**US Pandemic Influenza Stage:** Stage 0/1: New domestic animal outbreak in at-risk country/Suspected human outbreak overseas

*More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at: http://bioterrorism.dhmh.state.md.us/flu.htm

**WHO update:** As of September 10, 2008, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 387, of which 245 have been fatal. Thus, the case fatality rate for human H5N1 is about 63%.

**AVIAN INFLUENZA, SUSPECTED (China):** 04 Dec 2008. Sources say that over the last few weeks, there has been an outbreak of possible avian influenza near Jiangsu's Haian and Dongtai counties. Local chicken deaths are relatively serious. Egg production has dropped sharply due to the outbreak. But because the outbreak has not yet been confirmed by authorities, it is still uncertain whether it is actually avian influenza. Area demand for poultry feed has dropped under the impact of chicken deaths and declining egg production.

**AVIAN INFLUENZA (India):** 30 Nov 2008. Migratory birds are behind the fresh outbreak of bird flu in Assam, Indian Health Minister Anbumani Ramadoss said Saturday 29 Nov 2008, adding that culling operations had started in the northeastern state and that inter-country bird movements are under close scrutiny. "Yes, we are concerned, and this new outbreak is mainly due to migratory birds," Ramadoss told IANS. "We are taking measures to control it, and let me assure you that everything is under control. A team from the central health ministry has already gone to Assam and is helping authorities there," he added. The minister said he has been keeping a close eye on the development and was closely monitoring the situation along with the animal husbandry department, which is under the central agricultural ministry. He said all possible help would be provided to the state government in terms of human resources, medicines, masks and other preventive measures. On Thursday 27 Nov 2008, the outbreak of bird flu in Assam was confirmed after laboratory tests confirmed strains of the deadly H5N1 avian influenza. More than 300 birds died in the past week in Kamrup district of Assam. "The culling operation has started, and inter-country bird movements are under close scrutiny," the minister said, adding that the bird flu outbreaks in the past had helped India gain experience to handle such situations. Asked about the frequent bird flu outbreaks in India, Ramadoss said: "Winter is a favorable period for the spread of bird flu. These migratory birds come southwards to India from other countries." While saying that there is "no need to panic," he added that these migratory bird movements cannot be stopped completely. Meanwhile, authorities in Assam have culled over 12 000 of the estimated 60 000 birds to be killed. The culling of ducks and chickens is being carried out in 48 villages within a 5-km radius of village Thakurchuba in Kamrup district, about 40 km west of Assam's main city of Guwahati. About 20 Rapid Response Teams, each comprising about 7 personnel including a veterinarian, are engaged in the culling that is expected to continue for about a week until the entire area is sanitized.

**NATIONAL DISEASE REPORTS:**

**HANTAVIRUS, SUSPECTED (New Mexico):** 01 Dec 2008. The New Mexico Department of Health has announced the state's 2nd Hantavirus death in the state this year. It confirmed a 22-year-old woman from Otero County has died. Hantavirus is a deadly disease transmitted by infected rodents through urine, droppings or saliva. "Hantavirus is caused by rodents and rodent dropping so what people need to do is they need to be very careful when they are cleaning out places. They need to use disinfectant, they need to air them out and they really need to take a lot of precaution," said Chris Minnick with the New Mexico Department of Health. Last year New Mexico had 3 cases of Hantavirus with 1 death. (Emerging Infectious Diseases are listed in Category C on the CDC list of Critical Biological Agents) *Non-suspect case

**INTERNATIONAL DISEASE REPORTS:**

**VIRAL HEMORRHAGIC FEVER (Brazil):** 04 Dec 2008. On 01 December 2008, the Ministry of Health of Brazil reported the occurrence of a case of acute hemorrhagic febrile syndrome in a 53-year-old male from Johannesburg, South Africa, with onset of symptoms on 23 November. The patient was hospitalized on 28 November with as suspected case of nephrolithiasis and died on 2 December. The main symptoms reported are described in Technical Note 03/12/2008 issued on 3 December 2008 by the Ministry of Health, Secretary of Health Surveillance (MS/SVS) of Brazil (in Portuguese). Clinical-epidemiological investigation of this case is being carried out by a multidisciplinary team led by the Secretariat of Health Surveillance. A differential diagnosis is being carried out for several agents related to hemorrhagic syndrome, such as arenavirus, rickettsiosis, leptospirosis, Hantavirus, malaria, and dengue, among others. One of the diagnostic hypotheses being considered is that the patient could have been infected by the new arenavirus recently reported in Zambia and South Africa. Laboratory tests are considering all these diagnostic hypotheses, working in collaboration with a team of professionals from South Africa who are actively involved in the investigation. Monitoring of the contacts

identified in this case is being carried out. Other clinical cases have not been recorded to date. The Pan American Health Organization is actively supporting the investigation of this case at both the level of its country office in Brazil and at its Regional headquarters. (Viral Hemorrhagic Fevers are listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

**SALMONELLOSIS, SEROTYPE TYPHIMURIUM PHAGE TYPE 42 (New Zealand):** 04 Dec 2008. A national outbreak of a potent and rare type of salmonellosis has health officials puzzled. Since mid-October 2008, 36 cases of Salmonella enterica serotype Typhimurium phage type 42 have been reported nationwide, with 16 of them in Canterbury. Environmental Science and Research started a national investigation about a week ago, with public health units and the Food Safety Authority trying to identify the source of the bacteria. The source is likely to be some form of food product. Most of the Canterbury people hit by the bug are female, with many children and middle-aged women among them. Ministry of Health chief adviser of population Greg Simmons said the outbreak was a significant one. There have been 16 confirmed cases of type 42 in Christchurch, 9 in Dunedin, 5 in Nelson, 2 in Auckland, and 1 each in Greymouth, Rotorua, Whakatane, and Waikato. There were 15 cases of type 42 in 2007 and 28 in 2006. At least 5 people nationwide had needed hospital treatment. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

**HANTAVIRUS (Chile):** 04 Dec 2008. A 24-year-old tourist from England died in a Temuco hospital this week, presumably the victim of a Hantavirus infection he developed while traveling in nearby Argentina, the Chilean daily El Mecurio reported. The man spent several days in the San Martin de los Andes area of Argentina before crossing into Chile's Region IX this past weekend. Upon arriving in Pucon, the English traveler complained of flu-like symptoms and severe respiratory problems. He was 1st treated in a local hospital, and then was later transferred to Temucoís Clinica Alemana, where he passed away on Tuesday 2 Dec 2008. Although health authorities have yet to confirm the exact cause of death, they suspect the man may have been infected by a particularly virulent Hantavirus strain so far unknown on the Chilean side of the border. Southern Chile and Argentina are recognized hotspots for the deadly virus, which was 1st discovered in the early 1950s during the Korean War. Humans can contract the virus through contact with rodents and their urine or feces. Dried rodent droppings, which can turn to power and thus be inhaled by people, are particularly dangerous. The illness usually takes 2-4 weeks to incubate and can begin with severe flu-like symptoms. It can eventually cause internal hemorrhaging and major organ failure. According to Chile's Health Ministry, there have been 37 confirmed Hantavirus cases this year, 7 of them fatal. (Emerging Infectious Diseases are listed in Category C on the CDC list of Critical Biological Agents) *Non-suspect case

**BRUCELLOSIS (Bosnia and Herzegovina):** 03 Dec 2008. Brucellosis is continuing to spread across Bosnia and Herzegovina and is reaching epidemic proportions, the country's leading epidemiologist warns. A total of 757 infections in people have been registered in 2008 just in the bigger Bosnian entity of Bosniak (Bosnian Muslim)-Croat federation, said Dr. Zlatko Puvacic, the leading federal epidemiologist, media reported on Monday 1 Dec 2008. Puvacic warned that this is almost a 100 percent increase compared to 2007. He also warned that the number of unregistered infected people is estimated to be 3 times higher. Data for the other Bosnian entity, Republika Srpska, was not immediately available, but brucellosis has been seen as a growing problem there as well. With more than 30 infections per 100,000 residents, Bosnia's Federation entity has seen the greatest share of brucellosis infections than any other European country, Puvacic said. In addition to hundreds of registered human cases, tens of thousands of cases of brucellosis have been registered among domestic animals in Bosnia over the past few years. Bosnia is especially susceptible to this and other infectious diseases transmitted by animals because of the weak capacity of its health and veterinary services, but also because of a complex administrative setup which prevents cooperation among different sectors and administrative units. As a result, many infected humans and animals are diagnosed late. Farmers often have to wait for weeks, even months for the culling of infected domestic animals, which are then sometimes inappropriately disposed of. In humans, brucellosis induces inconstant fevers, sweating, weakness, anemia, headaches, depression and muscular and bodily pain but is usually not fatal. It is treatable with antibiotics, although it can take weeks, even months to recover. (Brucellosis is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

**CHOLERA (Zimbabwe):** 03 Dec 2008. The Limpopo River, which delineates the border between Zimbabwe and South Africa before flowing through Mozambique into the Indian Ocean, has tested positive for cholera, according to local media reports. According to the UN, Zimbabwe's "unprecedented cholera outbreak" has claimed 565 lives from the 12,546 recorded cases since August 2008, and "is worsening and is becoming difficult to contain as it spreads from cities." Zimbabwe Doctors for Human Rights, a non-governmental organization, said the death toll could be in excess of 1000 people. The UN children's agency, UNICEF, said in a statement: "The onset of the rainy season threatens to make the waterborne disease endemic, as the spread of cholera becomes increasingly unpredictable and the response is outpaced by the outbreaks. Harare (the capital), where the highest numbers of cholera cases have been reported, continues to experience serious water outages." The provincial health department spokesperson for South Africa's Limpopo Province, which borders Zimbabwe, told a local radio station that all the cholera cases detected in South Africa were linked to the Zimbabwe outbreak. There have been 6 known deaths from cholera in South Africa, 2 South Africans and 4 Zimbabweans. UNICEF said it had provided the Harare authorities with a month's supply of water treatment chemicals for the city and was distributing about 360,000 liters of drinking water daily. Fuel, also in short supply, was being provided to assist in the cholera emergency; 40,000 liters of intravenous fluids had been distributed, as well as thousands of hygiene kits, water treatment tablets and body bags. Reticulated water was reportedly restored to Harare on 3 Dec 2008 after all water supplies had been cut off for the past few days. The cholera epidemic is now affecting 42 of Zimbabwe's 62 districts. (Water Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

**SALMONELLOSIS, SCHOOL CHILDREN (Latvia):** 01 Dec 2008. More than 80 children have been infected with salmonellosis in the western city of Liepaja, Latvia in the past 12 days, national health officials said on Friday 28 Nov 2008. All of the children, aged between 2 and 10, were at kindergartens and schools serviced by the food company Maras Lacis. The company has been temporally shut down, a spokesman for the national food and veterinary service said. Of the infected children, 13 have been hospitalized. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

**ANTHRAX, BOVINE, HUMAN (Zimbabwe):** 01 Dec 2008. An outbreak of the deadly cattle-born disease anthrax is threatening to turn into Zimbabwe's worst yet, compounding a 7-week national epidemic of cholera, an international aid agency warned Monday 1 Dec 2008. The British-based Save the Children Fund said health workers had reported 32 cases of human infection and 3 deaths of people who had probably been eating meat from the carcasses of cattle infected with the disease in remote northwest Zimbabwe. The disease had already killed 150 livestock, 2 elephants, 70 hippo, and 50 buffalo. It threatened to wipe out 60,000 cattle in the region, it said. Spokeswoman Rachel Pounds said the outbreak could be the worst since the country's civil war for black majority rule that preceded independence in 1980, when hundreds of people were reported to have died. There was a risk that the disease, which is usually fatal if not treated with heavy antibiotic doses, could spread out of the Binga district in the Zambezi river valley, into the tourist town of Victoria Falls and across the border into neighboring Zambia, she said. Traders had been seen trucking potentially infected meat from Binga to Victoria Falls. "Many families in the Zambezi Valley are so hungry they are taking meat from the carcasses of their animals, even if they know it's diseased, and feeding it to their children," Pounds said. "Families no longer have choice here. Even if they know they shouldn't sell their livestock, it's often the only way of making money to feed themselves." Zimbabwe is in the grip of a deadly complex of crises, with a collapsing economy, famine with nearly 4 million people facing starvation, the shut-down of infrastructure including hospitals and schools, and the failure of services like water, electricity, sewerage disposal, and refuse collection. "Quarantines against the movement of potentially infected meat may be in place, but Zimbabwe's systems have collapsed," Pounds said. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

**OTHER RESOURCES AND ARTICLES OF INTEREST:**

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://bioterrorism.dhmh.state.md.us/

Maryland's Resident Influenza Tracking System: www.tinyurl.com/flu-enroll

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**NOTE**: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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